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Assisting School Level Teams to Identify and Address the Needs of Struggling Learners through a Tiered Intervention and Aligned Professional Development Model

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ASSISTING SCHOOL LEVEL TEAMS TO IDENTIFY
AND ADDRESS THE NEEDS OF STRUGGLING LEARNERS
THROUGH A TIERED INTERVENTION AND ALIGNED PROFESSIONAL
DEVELOPMENT MODEL

By
Tammy Dionne Person

A Dissertation
Submitted in Partial Fulfillment of the Requirements for
the Degree of Doctor of Education
in Curriculum and Leadership
(CURRICULUM)

Columbus State University
Columbus, GA

December 2019

DEDICATION

First and foremost, I want to give honor and glory to God, for without his grace, I would not have been able to complete this journey. If I had not kept him first, I would not have preserved through completion of this project and my degree.

Next, I would like to thank my family both immediate and extended along with all of my dear friends. My husband, Audie, has been there to provide support and encouragement. My children, Autumn and Audie Jr., have watched me as I went to school all of these years, and I hope that I have been a source of inspiration to you both. My father and mother, Merl and Autrice Taylor, have provided me all of my life with the words to keep pushing, and I hope you are proud of what I have been able to accomplish and become. It is because of you both that I have grown into the woman that I am today. You have instilled in me the importance of education and the pursuit of my dreams. My extended family and friends have always been there to tell me I can do it when I talked about how hard things were, and for that I am forever grateful. I love you all.

I have always relied on the Bible verse from Philippians 4:13-“I can do all things through Christ who strengthens me.” As I bring this chapter of my life to a close, I look forward to what is next for me.

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ABSTRACT

The adoption of the IDEA charged schools with the responsibility of identifying students who have disabilities and special needs and then providing them with appropriate educational services so that they progress academically. Schools have adopted, implemented, and revised a variety of screening processes to identify these students. The process of trying to help students who are experiencing difficulties is often referred to as RTI. The RTI framework is comprised of a multi-tiered educational system that outlines instructional practices based on student needs. Many schools have formed teams and devised policies to explore options for student assistance. This study involved designing and providing professional development to two school teams responsible for an RTI process for students who have been identified as being at-risk or in need of intervention for academic problems. The primary purpose of this study was to conduct an ex post facto analysis of data on the design, implementation, and effectiveness of a professional development model intended to support RTI teams of elementary educators in order to reduce the number of referrals for special education evaluation and placements. The study examined the files of 56 students enrolled in two schools. A school district designed tool to measure presence or absence of 10 components in a Student Support Team file was used for data collection. Data analysis included an ANOVA. Results indicated that an increased number of students' SST files were complete and consistent after the professional development. Results lend support to the premise that aligning professional development to address real school issues would be an effective strategy to consider when challenging school issues arise.

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CHAPTER I

INTRODUCTION

Background of the Problem

Since the adoption of the Individuals with Disabilities Education Act (IDEA 2004), schools have been charged with identifying students who have disabilities and special needs and providing them with education services that provide for student needs so that they can achieve academically. Consequently, school systems have created screening procedures to identify students at-risk and developed various interventions and procedures for implementing them. Identifying students with needs, as the first step in the process, is as critical as the interventions that are developed and applied to those students who need help. Schools, accordingly, over the last 12 or so years have adopted, implemented, and revised a variety of screening processes to identify students in need, students with disabilities, and the nature of their disabilities. For example, data about a student are used to draw inferences about how a student is functioning (Ball & Christ, 2012). The student is deemed as either falling above or below expectations. If a student is deemed performing below expectations in response to general classroom instruction, the decision may be made to place the student in more intense intervention or to conduct more assessments for the purpose of intervention planning (Ball & Christ, 2012).

The start of the process of trying to help students who are experiencing difficulties is often referred to as Response to Intervention or RTI. RTI is based on the theoretical premise that the failure to learn is not the fault of the student and learning can

be improved by changes to the environment (Samson, 2009). RTI is designed to identify learners having difficulty sooner, provide them with interventions that may be needed to address learning problems, and to assist with identification of children with disabilities (Council for Exceptional Children, 2008).

One reason RTI emerged in schools was the 2004 reauthorization of the Individuals with Disabilities Education Act that authorized the implementation of a new model of assessment and intervention for children with learning problems (Koutsoftas, Harmin, & Gray, 2009). The law prompted a change in how students had previously been identified for learning disabilities where the use of discrepancy between ability and achievement was the primary method (Murawski & Hughes, 2009). In contrast, the RTI framework is comprised of a multi-tiered educational system that outlines practices based on student needs.

Statement of the Problem

There are students with different ability levels in a typical elementary school classroom. When teachers have students who are having difficulty learning and retaining information, they are expected to try different methods to help the students be successful. When teachers have attempted strategies within their classrooms without success, they often turn to the resources within their schools that may be available to help them. Ideally, RTI and the Student Support Team (SST) that manages the RTI process would be such a school resource. Moreover, in some school districts, there is a need for uniform, standardized policies and procedures so that teams responsible for RTI can operate in an efficient and effective manner. In order to operate efficiently and effectively, schools need to implement strategies aimed at improving student performance and achievement.

Such strategies may include revision of current written and unwritten policies and procedures that have resulted in increased numbers of students referred for assessment and increased identification of students who receive special education services.

Ineffective educational practices and procedures also may have resulted in increased numbers of students being assessed for and placed in special education when they may have responded to interventions that could be attempted in the regular education setting.

Since RTI implementation in schools, one noted trend in education has been that increasing numbers of students are being identified as in need of special education services because of difficulties with learning or behavior. As noted by van Kraayenoord (2010), “one group of students about whom much concern has been expressed with respect to their overrepresentations among those with learning disabilities and in the special education system are those with culturally and linguistically diverse backgrounds” (p. 366). Research on special education has indicated a steady increase in the number of children, including minorities who have been identified as needing special education services.

Schools are tasked with providing ways to help all students to perform better at school, including students who are struggling or have been identified as at-risk. Increased academic performance of students can result in many positive changes in not only students but in overall school functioning. Use of RTI strategies can assist students who are at-risk or identified as experiencing academic failure. As noted by Murawski and Hughes (2009), “the RTI approach emphasizes the use of intensive instruction to fill in gaps before small gaps in students’ achievement result in large ones” (p. 268). RTI can help to decrease the number of students improperly placed in special education

because of the use of interventions that are not successful at increasing student functioning.

Research Questions and Hypotheses

There were two research questions that were examined through this study. The questions resulted in the generation of two hypotheses related to the effect of professional development on the SST teams at the two schools that were the focus for this study. Research Question 1 examined whether professional development that addressed the skills and knowledge about how to correctly review student files for deciding on placement into special education improves the quality of the evaluation process.

Null Hypothesis: The number of screening process omissions after the professional development is equal to the number of omissions before the professional development.

Alternative Hypothesis: The number of screening process omissions after the professional development is less than the number of omissions before the professional development.

Null Hypothesis: $\mu_{\text{before}} = \mu_{\text{after}}$

Alternative Hypothesis: $\mu_{\text{before}} > \mu_{\text{after}}$

Research Question 2 examined whether professional development increases the number of correct decisions made regarding special education referral.

Null Hypothesis: The number of correct decisions made regarding special education referral after the professional development is equal to the number correct decisions made before the professional development.

Alternative Hypothesis: The number of correct decisions made regarding special education referral after the professional development is more than the number of placement errors before the professional development.

Null Hypothesis: $\mu_{\text{before}} = \mu_{\text{after}}$

Alternative Hypothesis: $\mu_{\text{before}} < \mu_{\text{after}}$

The research questions examined through this research related to the effects of professional development on school team skills when intervening with students with academic and/or behavioral difficulties. Each of the research questions was examined based on the data collected from the review of SST files and information about referral of students by the team for evaluation for special education services.

Theoretical Framework

As the number of referrals for consideration and identification for special education continued to rise, increased attention was given to how students were identified. The significant and continued rise in the number of students receiving special education services resulted in more attention from lawmakers and others in special education. The increased attention and findings from it started a campaign to discover how to decrease the numbers of students receiving special education services. RTI was the multi-tiered intervention process that was intended to assist struggling students and ultimately decrease the numbers of students who received special education services.

The Comer School Development Program (SDP) framework is one that has the intention of improving overall school functioning. The program is centered on the concept of change in schools, and it was the theoretical framework that guided this research. The SDP has the goal of improving schools and student achievement. Results

of the program have shown significant increases in the school climate and improved student achievement and behavior (Haynes, Comer, & Hamilton-Lee, 1988). The SDP can be used as a guide for RTI processes in a school or district to assist with increasing the effectiveness of schools.

Methodology Overview

This study examined the effect of professional development on SST referrals and the number of students who participate in processes implemented in schools to assist struggling learners prior to their referral for assessment for special education services. This study examined research questions through the use of data collected from SST files of students. This method of file review for data collection was used to examine the research questions because the method provided objective information about school teams' knowledge and skills. This study used quantitative statistical analysis methods, and data was analyzed using an analysis of variance to determine if the professional development had a significant effect on the scores of files before the professional development.

Limitations

One limitation of this study was the length of time that the professional development was provided. The professional development in this study was provided over one semester of the school year due to changes in staffing and structure in the school district in which the study was conducted. The original intention of the study was to examine the effects of professional development provided to the SST teams beyond one school year.

Another limitation was the setting of the research. The setting was a public-school district where there were high rates of staff mobility both between schools within the district and to schools outside of the district. Staff mobility resulted in constant changes in school teams, and mobility could have impacted the data contained in SST student files because changes in team composition could have affected what information was in a file.

Definition of Terms

The terms used throughout this study will be defined as listed below:

Aligned professional development - workshops or seminars provided to school personnel.

The workshops or seminars were designed by district level staff for the specific purpose of increasing the knowledge of school personnel.

School level teams - teams at the school level who are responsible for designing intervention for students who are experiencing difficulties in the school environment.

The team may include the school psychologist, school counselor, teachers, reading and math specialists, and any other school staff who may have an interest or expertise in the areas of concern.

Struggling students - students identified by the general education classroom teacher as experiencing academic and/or behavioral difficulties.

Tiered intervention - an RTI/SST process that includes successive levels of intervention for struggling students. Tier One has an emphasis on using instruction that has been proven to be effective and help all students to learn. Tier Two interventions are intended to provide more instruction to students who continue to have difficulties after being given

Tier One intervention. In most Tier Three models, concentrated and specialized intervention is provided to address student difficulties.

Significance of the Study

This study was intended to further the existing research on RTI and tiered intervention processes. It was designed to identify ways to implement RTI and planned interventions using research-based methods. Additionally, this study was devised to make school districts more aware of their practices when considering students for special education services and to provide ways to design professional development that can be used to help teams make appropriate decisions about interventions. This study's major intent was to help schools and districts identify ways to improve RTI policies, procedures, and decision-making processes in order to better assure that academically struggling students are educated in the least restrictive environment.

The primary purpose of this study was to design, implement, and evaluate a professional development model intended to increase the pedagogical knowledge and instructional practices of elementary educators in order to improve student achievement and to reduce the number of referrals for special education services. The model used was designed to help with decision making of school teams and teachers as they attempted to help students maximize learning and increase achievement performance. Helping schools to identify ways to reduce the number of students referred for or placed into special education would be a benefit particularly as related to special education compliance regarding education in the least restrictive environment.

This study was designed also to help inform schools about ways to improve their existing tiered intervention practices. The primary purpose of the study was to evaluate

professional development and training modules on processes that are provided to school staff to determine whether the decision-making process employed by the (SST) reduced the number of misidentifications of students needing evaluation for placement in special education.

Summary

RTI is intended to improve the functioning of school teams who assist students with academic and/or behavioral problems. This research was designed to provide additional information about RTI and the use of RTI by school teams. The improvement of functioning in school teams who oversee SST processes aims to decrease the referral of and subsequent placement of students in special education. The school teams included in this study were provided with professional development that was designed to increase knowledge and skills and ultimately impact processes and the ability of the teams to benefit students in a school or district.

CHAPTER II

REVIEW OF LITERATURE

Introduction

This chapter examines some of the literature pertaining to RTI, the implementation of RTI in elementary schools, and professional development models that may be beneficial in assisting SST to meet the academic needs of struggling elementary school students. This review of literature begins with an overview of student learning and instructional that supports struggling learners in particular. The variability of how students learn is well-documented in the research literature as is the practitioner research related to the instructional approaches from which academically struggling students have benefited. Research related to the success of the RTI process in schools revealed a link between teacher and SST knowledge and use of effective instructional practices with struggling learners. A longitudinal examination of RTI studies revealed some ongoing challenges and inconsistencies in how schools implement, monitor, evaluate, and restructure when necessary the operating procedures of SST teams. The final section of this literature review is focused on professional development models that have been employed as systematic ways to improve student achievement.

Learning Theory, Student Learning, and Instruction

According to Davis (2004), “learning involves knowledge, memory, understanding, belief, motivation, and attitude” (p. 24). Everything a child sees, hears, thinks, and touches is transferred into an activity that is stored within the brain

(Wasserman, 2007). Individuals influence and are influenced by their environment. As this process happens, changes occur in the brain. Differences in learning must be accounted for when teaching information.

Research about the brain, brain development, structure, and the ways that brain function affects learning can be used by educators to assist in determining the most effective ways to instruct students. Tommerdahl (2010) pointed out that there is a “movement toward the development of a new field where the two subject areas (neuroscience and education) work in close alignment with a common goal of developing teaching methods supported by knowledge of the mind and brain” (p. 97). Brain function research has led educators to look at the ways that research can translate into the classroom, most notably in teaching methodologies and strategies. Teachers being aware of processes in the brain associated with learning can help with planning curriculums that best meets the needs of students (Wasserman, 2007).

Eskrootchi and Oskrochi (2010) noted that “an increasing body of research shows that the way knowledge is presented to students in school and the kinds of operations they are asked to perform often result in students knowing something but failing to use it when relevant” (p. 236). Educators must consider additional instructional methods and educational experiences that can be used to maximize learning and application of knowledge. As noted by Peters and Frolin (2011), “there is a clear need to ensure that the most effective teaching and learning approaches are used to enhance all aspects of inclusive provision, in the increasingly diverse classrooms of today’s schools” (p. 138). Continued research on effective instructional practices could help to make the design of more effective and inclusive instruction possible (Hinton, Miyamoto, & Della-Chiesa,

2008). The use of different instructional methods can contribute to a change in brain functioning, acquisition of knowledge, and an increase in abilities. Such differentiated instruction can have an impact on student achievement.

Moore-Hayes (2011) noted that changes in how we receive and give information suggest that educators require new tools for teaching and learning. Differing abilities and learning styles can contribute to how students are able to process and retain information that they are taught. Some students will be able to understand instruction and learn what is being taught without difficulty. Other students will encounter difficulty when trying to learn and retain information that is presented to them due to limitations in their learning.

Teachers often have limited time to devote to individual student instruction. They are often tasked with teaching numerous concepts and more information in shorter amounts of time. Due to time and other constraints, teachers have to look for ways to instruct students more effectively and efficiently. Lack of knowledge about what is available and how to effectively use it can have a significant impact on how students are taught and what they learn. Students who have specific academic, behavioral, and communication needs may struggle to learn course information. Limitations in learning, inability to apply information that is learned, or demonstrating skills that are discrepant from grade-level peers can result in students experiencing or becoming identified as at-risk for academic failure (Dunn, 2010). For those students who are having difficulties, there is a need to intervene.

History of Response to Intervention

Special education as a federal policy started with the passing of the Education of All Handicapped Children in 1975, which is commonly known as Public Law 94-142

(Preston, Wood, & Stecker, 2016). The 2004 reauthorization of the Individuals with Disabilities Education Act allowed implementation of a new model of evaluation and intervention for students who have problems with learning (Koutsoftas et al., 2009). Additionally, The No Child Left Behind law mandated that “rigorous, scientifically-based instruction and assessment of progress by grade-level testing at the school, school district, and state levels, with results disaggregated by gender, racial/ethnic status, family income, and disability” be implemented (Moore, 2008, p. 347). These mandates regarding instruction and assessment have led to the development of instructional methods aimed at addressing the academic and behavioral needs of students.

A requirement of the Individuals with Disabilities Act of 2004 was the notion that the overall assessment process of students with suspected disabilities should involve the use of multi-tiered, evidence-based intervention (Carney & Stiefel, 2008). School districts were tasked with ways to put systems in place that would provide support for educators and administrators as they implemented and sustained the use of evidence-based practices using a model that would improve student achievement (Danielson, Doolittle, & Bradley, 2007). The intervention process provided ways for schools to identify specific student needs and provide targeted strategies to address concerns that may be impacting how students perform.

In an attempt to address the requirements of providing evidenced-based instruction to struggling students, the RTI process was developed. The RTI process is designed to identify struggling students early, give access to needed help, and also to recognize students with disabilities (Council for Exceptional Children, 2008). Although mandated by the law, the design and implementation of RTI processes and services can

vary from school to school and from district to district in schools across the United States.

The “core features of RTI have been identified as high quality, research-based classroom instruction, universal screening, continuous progress monitoring, research-based secondary or tertiary interventions, progress monitoring during interventions, and fidelity measures” (Bradley, Danielson, & Doolittle, 2005, p. 486). RTI is based on the theory that a student’s failure to learn is not the responsibility of the individual and learning can be improved by changes in the environment (Samson, 2009).

RTI has also been defined as “a multi-tiered approach to help struggling learners” (Hughes & Dexter, 2011, p. 4). The RTI approach could involve intervention containing three to four tiers depending on the design of the model and is aimed at helping students to perform better. More intensive intervention phases within RTI are used depending on the needs of the student and the student’s response to the intervention or interventions that are used. The RTI process helps to meet the varied academic and behavioral needs of classroom students (Whitaker, 2012). The RTI process can occur through the use of various techniques both inside and outside of the classroom at a school.

At its heart, RTI can be described as a systematic and all-inclusive teaching and learning process that is intended to identify and prevent student academic failure through individualized or intensified instruction (Murakami-Ramvalho & Wilcox, 2012). RTI includes the evaluation of the intensity of intervention needed to help students as well as the level of student response to the interventions that are used (Duhon, Mesmer, Atkins, Greguson, & Olinger, 2009). A core feature of RTI includes the use of research and

evidence-based instruction and methods (Beecher, 2011). Careful consideration should be given to what interventions are chosen to try to help students.

RTI has the potential to be considered an improvement over the “wait to fail” practice where students have to be considerably delayed before intervention is provided (Beecher, 2011). As RTI models are implemented by schools across the United States, differences in how educators address the necessities of struggling students are being examined (Drame & Xu, 2008). The changes in laws brought RTI to the forefront in education because it required the use of methods that would attempt to help struggling students before they would be referred for special education services. The process of identification of students “shifts the focus from an assumption that something is wrong with an individual child to an examination of the fit between the child and the environment” (Murawski & Hughes, 2009, p. 268).

The RTI model is grounded in the provision of a quality education that is established by research. The research-based methods used to design specific plans for students with identified problems or the potential to experience problems form the foundation of this model and its use by school teams. This use of methods will have an impact on not only how students learn but also how they achieve.

RTI has been described as a modern alternative to what has been considered a defective pre-referral intervention model (Hoover, 2010). Past pre-referral practices would wait for students to be significantly behind before they would attempt an intervention. RTI uses data and information to show student progress toward a point that has been identified as indicative of satisfactory progress in achievement or behavior earlier than when students are significantly behind peers. Although the requirement is

there for schools to provide intervention to struggling students, how schools choose to fulfill this requirement varies (Carney & Stiefel, 2008). Each RTI model can look different depending on the needs of the school and the students. If a student does not respond to the different levels of intervention, then a referral for assessment for special education services may be warranted.

The RTI model has been researched for at least the past two decades and has resulted in it being talked about, analyzed, and acclaimed as the new assessment tool (Hughes & Dexter, 2011). It can also be seen as a way of “doing business” as a method for focusing on the behavioral, social, and academic difficulties of students not yet known as having a disability (Drame & Xu, 2008). As pointed out by Richards et al. (2007), “while catalyzed by special education legislation, RTI is essentially a model of effective schools with widespread implications for how all school personnel are prepared, acculturated to the school environment, and how they implement instruction in the classroom” (p. 60). The RTI model has been shown, when implemented properly, to impact student achievement positively in schools.

Response to Intervention Process

Supporters of RTI have the belief that learners who receive sufficient teaching in the mainstream classroom will adequately achieve and learners who do not progress should receive systematic assessment and observation to determine whether or not there is a disability (Drame & Xu, 2008). Additionally, they believe that “a successful model for making special education decisions should be based on structured, data-based problem solving, flexible service delivery, regular monitoring of student progress on socially valid outcome measures, and a focus on the natural classroom contexts” (Bradley

et al., 2005, p. 486). The use of this model can provide school teams, teachers, other education specialists, and even parents with information that can be used to increase student academic and behavioral success. RTI uses data to show student progress toward grade level curriculum expectations. The information gathered can be used to design specific plans for students that could result in better performance.

RTI uses a structure where students can be served using a multi-tier education system (Samson, 2009). This system usually involves the use of three levels of primary, secondary, and supplemental prevention and intervention and one that involves a more intense tertiary intervention system (Kratochwill, Volpiansky, Clements, & Ball, 2007). Tier One and Tier Two instruction should provide sufficient support to over 90% of students who are having difficulties (Hoover & Love, 2011). However, about five percent of students who do not respond to Tier One and Tier Two instruction require more intense intervention at the tertiary level (Fuchs, Fuchs, & Compton, 2010).

In most RTI models, Tier One of the process includes looking at the quality of teaching in the general education classroom by measuring the academic progress of all students when compared to other classes in the same school or in the district (Drame & Xu, 2008). Most students who are given this level of intervention respond. Tier One stresses being proactive in providing a strong instructional program in classrooms where student academic progress is low (Drame & Xu, 2008). Tier One has an emphasis on using instruction that has been shown to be effective and help all students to learn. An essential element of Tier One may be the use of school-wide screening and progress monitoring (Moore, 2008). The school-wide screenings and progress monitoring play a large part in ensuring that the Tier One intervention process is successful.

Tier Two interventions are intended to provide more instruction to students who continue to have difficulties after receiving Tier One intervention. Tier Two interventions have been described as “following one of two types of methodologies, referred to as either a standard protocol or a problem-solving model” (Carney & Stiefel, 2008, p. 62). The standard protocol model implies that the same methods will be used for students with similar difficulties. The problem-solving model, on the other hand, uses an inductive approach (Carney & Stiefel, 2008). It calls for individualized interventions based on student needs along with an evaluation of how they respond. One component of Tier Two interventions is the monitoring of student progress based on the interventions that they receive. Progress monitoring serves two purposes, “the data are used to make instructional decisions based on students’ strengths and needs and to determine where the student is responding to the interventions” (Richards, Pavri, Golez, Canges, & Murphy, 2007). Instruction that is in addition to Tier One instruction and progress monitoring practices are a hallmark of Tier Two instruction.

When a student does not sufficiently respond to interventions at the Tier One and Tier Two levels, there may be a need to go to the higher Tier Three intervention. In most models, at the Tier Three level, concentrated and specialized intervention is provided to address student difficulties. This tier provides specially designed instruction and related services, referred to as special education, and this instruction is provided by special educators, related service providers, and other professionals (Council for Exceptional Children, 2007). The intense level of services provided in Tier Three may be outlined by an Individualized Education Program (IEP) for students with disabilities or a specific plan for instruction for students who may not yet have been identified as having a

disability. Tier Three is characterized by stronger instructional components, and instruction is targeted and intense based on a student's lack of progress from intervention in the two previous tiers (Daly, Martens, Barnett, Witt, & Olson, 2007). Tier Three is the most intensive stage of RTI for students who are experiencing academic or behavior difficulties.

Assessment of Progress in RTI

RTI includes “the practice of frequent progress monitoring and the use of data to make educational decisions about instructional and grouping practices as well as the duration, frequency, and amount of time allotted for interventions” (Reutebuch, 2008, p. 126). Pelligrino and Quellmalz (2010) point out that the development of new ways to assess has helped to provide more information about how, when, and where to assess and links it to teaching and learning. They noted that assessment has helped to support the movement toward the design of useful assessment that will help teachers to identify student learning needs and requirements more effectively. Further, the assessment could help with an overall improvement in education and promote the changing of educational policies and practices (Pelligrino & Quellmalz, 2010). This assessment can provide teachers with important information about students' progress.

Traditional testing may help with the prediction of what students know and help teachers to identify what areas of instruction need more attention, but they do not teach things that are not already known (Landauer, Lochbaum, & Dooley, 2009). Formative assessment is viewed as an effective way to measure student achievement, especially when schools are faced with meeting accountability goals (Pelligrino & Quellmalz, 2010). Landauer, Lochbaum, and Dooley (2009) noted that learning to read, write, and

complete mathematical problems are dynamic activities that should be assessed very quickly and frequently. This type of assessment can help teachers to measure student understanding and retention of concepts that are being taught and provide a way for instruction to immediately be adjusted as necessary or required.

Response to Intervention Teams

In an answer to the need to support students, many schools have formed teams and devised policies to explore options for student assistance. These teams, often composed of multiple school professionals and members of the student's family, may serve multiple purposes and be called by different names (Nellis, 2012). Team members may have varied expertise, backgrounds, and training that can help with the whole child not just one aspect of development (Turse & Albrecht, 2015). The school professionals on the team can include the student's teacher, administrators, school psychologist, school counselor, reading and math specialists, and any other school staff who may have an interest or expertise in the areas of concern. The teams work to design a plan to see if at-risk students will respond to the interventions that are designed to help them make adequate progress in school (Nellis, 2012). This team is tasked with coming up with additional resources or strategies that can be used in classrooms to help students who are not making adequate progress or to provide teachers with additional strategies to help at-risk students.

Teaming is widely regarded as key in the design and implementation of procedures, processes, and practices in RTI (Nellis, 2012). Tiered intervention models may require each team to have members fill different roles and participate in planning. Additionally, they offer opportunities for interactions with colleagues who are supportive

(Lhospital & Gregory, 2009). These teams may function as “pre-referral intervention groups that link all school resources to better meet the needs of a student with persistent academic, social-emotional, or behavioral problems” (Kovaleski, Tucker, & Stevens, 1996, p. 44). The team concept in RTI is an important feature in this process to assist struggling learners.

An important part of the RTI process is the partnership between the members of the team that is responsible for oversight of the process and implementation of intervention plans. Partnership means that both specialist and regular education staff must work collectively to help support student learning (van Kraayenoord, 2010). General education teachers will be required to examine more closely individual student needs when developing strategies to be used with students and special educators will take a more active role in assisting with the delivering of individualized intensive interventions (Richards et al., 2007). This effort would allow team members to “collaborate to create and implement individualized instruction and supports needed to increase the academic success and social participation of the focal students” (Hunt, Soto, Maier, & Doering, 2003, p. 317).

The importance of the teams has been highlighted in recent years with a revision to special education laws and as schools are directed to attempt to reduce the numbers of students identified and placed in special education. As stated by Preston, Wood, and Stecker (2016), “pre-service teachers, in-service teachers, administrators, support staff, and members of school-based RTI teams may benefit from a deeper understanding of how RTI became popular and the legislation supporting it” (p. 173). This knowledge can

assist in decision making for students who have been identified as experiencing or at-risk for school problems.

Problem-solving consultation teams have become potential mechanisms for change in schools (Rafoth & Foriska, 2006). The problem-solving model and implementation in the context of collaborative teams have evolved over time from a process to assist teachers in a major component of school reform efforts (Kovaleski & Glew, 2006). These teams “engage in a problem-solving process to review student data, determine needed instructional and intervention strategies to increase academic progress, support implementation of the needed strategies and collection of student progress data, evaluate the effectiveness of strategies, and determine necessary future actions” (Nellis, 2012, p. 247). Teams work together to find the most effective way to assist students who may be experiencing difficulty.

The members of the team can work together to ensure that instruction is assessment driven, individualized, focused and specific, which in turn will allow for appropriate identification, teaching, and behavioral support for students in need (Reutebuch, 2008). As noted by Bean and Lillenstein (2012), “to collaborate effectively there must be a sharing of and value for diverse perspectives and preparation to attain the larger goal of enhanced instructional decision making and improved student outcomes” (p. 405). Effective collaboration can have a positive effect on not only students, but on teaching practices, and overall achievement and functioning in a school. Schools should make clear what the specific roles and tasks of the members are so that the focus remains on successful student outcomes (Richards et al., 2007). Working as a team to implement a comprehensive RTI model can help students who need additional support. Use of sound

RTI practices can lead to improved educational practices, better performance of students, and result in an improvement of the overall functioning of a school or district.

School-based teams must also be able to make sure that instruction has been tailored to the student's individual level of ability (Daly et al., 2007). The teams have to be able to align the methods of instruction with resources so that students are taught at their skill level. The members who provide the intervention techniques that have empirical validation to students have to be trained so that interventions are implemented with accuracy and reliability (Drame & Xu, 2008). The determination of whether or not a method has been effective or if there is a need for additional services is determined on a child-by-child basis (Daly et al., 2007). The school teams design instruction and research-based intervention for students that are personalized.

If implemented properly and with fidelity, RTI can result in decreased special education referrals and reduce the possibility of incorrect placement of students in special education (Hoover, 2010). Additionally, RTI may help to prevent other potential issues that students may face, including "school dropout, unemployment, incarceration, poor health, and other life-limiting sequelae of inadequate academic performance" (Fuchs, Fuchs, & Compton, 2012, p. 270). There is a need for shared values, total commitment, and administrative support with resources and incentives for a successful RTI program in a school (Richards et al., 2007). RTI programs can reduce special education referrals and placement if teams work together to assist students who are experiencing difficulties.

As pointed out by Moore-Hayes (2011), today's educators face unique challenges in the classroom that can greatly impact their perceptions of personal and professional success. Richards et al. (2007) highlighted that "to successfully implement an RTI model

will require supportive school teams comprising of special educators, school psychologists, speech therapists, reading specialists, administrators, and others who will need to work together to assist the general education teacher in identifying at-risk learners, and in developing and implementing appropriate interventions and progress monitoring” (p. 60). The team can work collaboratively to help the teacher assist students and maximize their learning.

RTI Team Decision-Making Processes

The members of an RTI school team assist students who are experiencing difficulties in the school setting. The members of the team employ a method that is used to help those students who are identified as in need of additional assistance to be successful. This method involves the team engaging in problem identification, analysis of data and information, intervention design, and monitoring the outcomes of interventions (Powers & Mandal, 2011). Teams use various sources of information and use a process to design a plan for intervention for students that are aimed at students making progress or experiencing success. Models of problem-solving may vary in the number and names of different stages but most often follow a set of prescribed, progressive stages that may solve the present problem as well as prevent similar problems in the future (Young & Gaughan, 2010).

The initial step for teams who are addressing student’s difficulties involves establishing rapport and sharing information with regard to the problem that the student is facing (Musti-Rao, Hawkins, & Tan, 2011). The teams must have a clear understanding of the difficulties that the student is experiencing so that a specifically designed plan can be developed to address the identified issues. The interventions selected should be

evidence-based and must be a viable solution to the student's problem (Musti-Rao et al., 2011). Based on the effectiveness of the intervention or interventions chosen, teams may need to update or modify the plan.

Professional Development

The overall goal of professional development in schools is to positively impact instruction and teacher performance in the classroom (Gayton & McEwen, 2010). Professional development should be seen as a central component of school improvement (Kratochwill et al., 2007). Simon and Black (2011) indicate that it is a necessity to think about teacher, student, and school features when planning professional development as well as allowing teachers to assist with designing it when feasible so that appropriate decisions about professional development can be made.

As noted by Kratochwill et al. (2007), "a strong professional development program is needed for effective program implementation and program implementation integrity" (p. 622). One model of professional development that can help schools is Continuous Professional Development (CPD). CPD can include a wide variety of approaches and teaching and learning styles in a range of settings (Mujis & Lindsay, 2008). Three professional development strategies that can be used to support teacher improvement are meetings and workshops, self-monitoring, and instructional coaching with each used sequentially and with increased intensity based on need (Thompson, Marchant, Anderson, Prater, & Gibb, 2012). A collaborative and continuous model of professional development can add to better understanding, stronger policies, and improved implementation of strategies and practices in schools (Collinson et al., 2009).

Effective professional development should include ongoing training and support so that a high degree of integrity in implementing change can occur (Kratochwill et al., 2007). Professional development is essential when systemic and systematic change is desired. The CPD model can impart various types of knowledge that can be modified to meet the needs of the learners. For teachers, this model allows for accommodation to different learning styles and paces. In order to create new knowledge, school staff require continuous learning and opportunities for dialogue and inquiry (Collinson et al., 2009). CPD can allow the opportunity for teachers to share information across schools and even districts.

Professional Development of Intervention Teams

Teams who are responsible for RTI must serve several functions. As noted by Nellis (2012), “regardless of which of the many purposes the team is fulfilling, clear procedures, decision rules, and documentation requirements are needed to guide their actions and support consistent implementation” (p. 251). RTI team members have to bring their knowledge and skills to help the team function effectively. These teams engage in problem-solving processes, including reviewing data, needs, and intervention strategies to determine courses of action for students who experience learning difficulties (Nellis, 2012). The teams use information that they gather to make informed decisions about what types of interventions to use for students. As pointed out by Lee (2009), “high functioning teams require member commitment to the group and its purpose; collaboration and cooperation; mutual respect and support; accountability to each other and to the desired outcomes; and a trusting and safe environment” (pp. 44-45). In order to help student support and intervention teams to assist struggling students, ongoing

professional development is necessary at the school and district levels (Richards et al., 2007). RTI teams who have received professional development use information to engage in processes to help students with learning problems.

Professional development challenges of intervention teams can include training practitioners on different aspects of RTI and systemic change factors that can influence the implementation of the process (Kratochwill et al., 2007). The implementation of the changes that may be proposed through RTI will require teams to be aware of aspects that may impact the model and address any possible resistance. Professional development is not just about the spread of information and skills but about the outcome of it on overall thinking and practice (Kratochwill et al., 2007). In the RTI model, valuable professional development can have a positive effect on students and student achievement.

Professional development seems to be an important component in the adoption and implementation of evidence-based practices (Kratochwill et al., 2007). The use of CPD in schools and as part of the RTI model may “result in the renewed commitment of teachers as change agents and in renewed or extended moral purpose, and these outcomes are crucial to teacher effectiveness” (Mujis & Lindsay, 2008, p. 198). Collinson et al. (2009) noted that professional development is “a critical piece for transforming education in the twenty-first century for teachers and their students” (p. 3). Professional development for RTI school teams can assist them in making decisions about how to assist students with learning difficulties.

The School Development Program

Before the passage of federal legislation on special education, there were initiatives in the United States to increase student learning. One initiative, the SDP,

aimed at improving the educational achievement of inner-city children. The program was developed by Dr. James Comer, a child psychiatrist, and colleagues at Yale University. The SDP began in 1968 in two of the lowest performing schools in New Haven, Connecticut and went through a period of fine-tuning from 1968 to 1975. Results of the program indicated significant increases in the school climate and improved student achievement and behavior (Haynes, et al., 1988). The process resulted in significant achievement and environmental improvements at schools across the country (Woodruff, 1996). Today, there are over 1,000 schools in numerous districts that are using the model (Yale School of Medicine, 2018).

A major premise of the SDP is that change must occur for school functioning to improve. The SDP theory of change model is shown in Figure 1. It illustrates how several different factors interact to affect change in a school. The model has an impact on the school culture as a whole and ultimately student achievement. The three guiding principles of the model are no fault, consensus decision making, and collaboration, which all focus on meeting the multiple needs of all children in the school (Drake & Bernard, 1994). The model involves all staff at a school and district, parents, and other community stakeholders in the change process. The guiding principles bring everyone together for the implementation of changes that will benefit all students.

The SDP involves three school teams: the School Planning and Management Team, Student and Staff Support Team, and a Parent/Family Team working together to implement a Comprehensive School Plan, a guiding document for the school (Lunenburg, 2011). The purpose of the plan is to affect change at the school level and move to a positive school climate. One component of the plan is staff development, which is focused on the capacities of staff and building their ability to meet the needs of their students. Teachers are encouraged to collaborate with a focus on learning and team-building programs that foster trust (Panjwani, 2011). When teachers are comfortable and able to trust one another, they are able to work together to address situations in the

classroom and in schools that result in better overall functioning and increased achievement in all students.

Summary

With its emphasis on team building to address school issues that impact student development, the SDP model was reflected in the design of the professional development delivered in this study. Each school's SST team was provided training about ways to address the individual needs of struggling students. With a uniform data collection timeline and decision-making protocol in place, this study was undertaken to evaluate the effectiveness of the delivered professional development on special education referrals and placements. While several evaluation strategies were considered, an independent review of SST records and decisions regarding special education referrals and placements was chosen. This evaluation methodology was consistent with the one used in the records reviewed by an independent agency team who cited disproportionality as an issue to be investigated and rectified. .

CHAPTER III

METHODOLOGY

Introduction

This study was undertaken to examine the impact of professional development designed to make changes in a school district's RTI process. The subsequent effectiveness of the professional development was measured by the type and amount of individual student data collected to make special education program referrals. The SST team was responsible for providing specifically designed assistance to students who were experiencing difficulty in the educational environment. For this study, the effectiveness of professional development provided to the school-level teams focused on team data-driven decision-making during the intervention process was examined to determine if it reduced referral for and placement in special education. An ex post facto review of individual student SST files was conducted to determine a quality score for each file as measured by an instrument utilized by the school district. Files compiled before the professional development ($n = 29$) and files compiled after professional development ($n = 27$) were scored with no duplicate or continual files between groups. An analysis of variance (ANOVA) test was conducted to determine significant difference between file scores before and after the professional development.

Background

In 2013, a school district in the Southeastern region of the United States underwent a mandatory routine independent review of special education program records.

Results of the review indicated a disproportionately high placement rate of students in special education services. The district was required to review its policies and procedures regarding eligibility for special education services and to submit a corrective action plan. The RTI procedure instituted at each school was a common factor in special education referrals and placements, and the district review team began its investigation with a school by school assessment of the RTI process for each school.

As a result of the school by school review, the district initiated the process of standardizing SST and intervention processes across the district. Continuing into the 2013-2014 school year, actions to address the findings from the independent review began at both the district and school levels. Professional development included discussions and training about the SST and its functions, the SST referral process, forms used to refer a student to the SST, and special education referral rates. During the 2014-2015 school year, forms used for the SST were formalized and used at every school in the district (see Appendix A for SST forms).

During the first semester of the 2015-2016 school year, each of the schools in the district received professional development on the functions of the SST processes. The professional development included a review of required forms to refer a student, how to choose interventions for struggling students (i.e., use of a problem solving and decision-making method), and how to monitor selected interventions. The final component of the professional development focused on how to evaluate the effectiveness of interventions selected prior to making the decision on whether or not to refer for evaluation for special education (see Appendix B for professional development presentation). The professional development sessions were provided by the district SST Coordinator to chairpersons and

members of the SST teams from each school from September through November of 2015. After the professional development provided in Fall 2015, the school teams began implementation of the new SST process. One follow-up professional development session to review what was presented and to answer team questions was provided to teams until February of 2016.

This ex-post facto design study was conducted to investigate the effectiveness of the focused professional development on data collected during the RTI process to make decisions about assistance to struggling students. A set of files compiled before the professional development sessions and another set of files compiled after the professional development were examined. Each file represented an individual student case and was scored using an instrument utilized by the school district .

Research Questions and Hypotheses

There were two research questions that were examined through this study. Research Question 1 examined whether professional development that addressed the skills and knowledge about how to correctly review student files for deciding on placement into special education improves the quality of the evaluation process.

Null Hypothesis: The number of screening process omissions after the professional development is equal to the number of omissions before the professional development.

Alternative Hypothesis: The number of screening process omissions after the professional development is less than the number of omissions before the professional development.

Null Hypothesis: $\mu_{\text{before}} = \mu_{\text{after}}$

Alternative Hypothesis: $\mu_{\text{before}} > \mu_{\text{after}}$

Research Question 2 examined whether professional development increases the number of correct decisions made regarding special education referral.

Null Hypothesis: The number of correct decisions made regarding special education referral after the professional development is equal to the number correct decisions made before the professional development.

Alternative Hypothesis: The number of correct decisions made regarding special education referral after the professional development is more than the number of placement errors before the professional development.

Null Hypothesis: $\mu_{\text{before}} = \mu_{\text{after}}$

Alternative Hypothesis: $\mu_{\text{before}} < \mu_{\text{after}}$

Each of the research questions was examined based on the data collected from the review of SST files and information about the referral of students by the team for evaluation for special education services. The research questions examined the quality of school teams' processes as they intervened to improve student functioning.

Research Design

The design of this ex-post facto quantitative study involved an examination of SST documents and student records to determine if the study's SST teams were effectively meeting the academic needs of struggling learners in the least restrictive environment. The study examined the use of information about the support provided to struggling students both before and after professional development was provided to school level SST teams. This study was conducted after the school district developed and

provided professional development to school teams about decision-making processes for students who had been identified as being at-risk or in need of intervention for academic problems.

Following the implementation of the structured professional development plan, information was collected about the effectiveness of the training aimed at furthering school teams' knowledge about the RTI process and the selection of interventions for struggling students on the decisions of the teams to refer students for assessment for special education. A variety of data contained in SST files was examined as a component of this study. The collection of data occurred over a period of 4 months. The primary focus of this study was an audit conducted of information maintained in the SST files about referrals and the intervention plans developed for students. In addition, a comparison of the number of students referred for evaluation for possible placement in special education programs was examined. The audits were conducted on SST student files compiled before and after the professional development.

Population

This study was conducted in a school district located in the Southeastern United States. Spread out over a large geographical area, the settings of the 10 district schools ranged from metropolitan to rural. Developed as a result of an audit of SST files by an independent agency monitoring team, this research project examined a real issue in the district. The results of the audit yielded several findings, including inconsistent implementation of the pre-referral process, an increased number of students being referred for special education evaluation, and higher than average percentages of students identified as having educational disabilities and eligible to receive services. The

percentage of students receiving special education services was particularly high at the elementary school level.

As a result of the audit by the agency monitoring team, the district where the schools were located determined that there needed to be a system-wide change in the processes used to identify and provide interventions to students identified as at-risk or experiencing learning difficulties. The district and schools that were a part of this study were responsible for managing the educational programming for students in pre-kindergarten through 12th grade. The district operated according to a mission statement aimed at making students successful and ultimately productive members of their communities. The schools that participated in this study provided services for students identified as at-risk as well as students who were identified as students with disabilities and in need of services.

The sample in this study was comprised of teams at two elementary schools who designed intervention plans for at-risk students or students who are experiencing academic difficulties. Student enrollment was from kindergarten through fifth grade. These two schools were chosen for study based on the number of students who were referred to the SST or who had been referred for or were receiving special education services. In these two schools, 20% or more of their student enrollment received special education services.

Participants

For this study, two elementary schools were selected as focus sites. At these sites, members of the SST team who received professional development included the SST chairperson, administrators, teachers, and school psychologists. Table 1 shows the total

student enrollment and percentage of students receiving special education services at each of the elementary schools in this study.

Table 1

Total Enrollment and Special Education Rates for Study Schools by School Year

School Year	<u>School A</u>		<u>School B</u>	
	Total Enrollment	Special Education Percentage	Total Enrollment	Special Education Percentage
2012-2013	488	20%	408	14%
2013-2014	305	24%	439	12%
2014-2015	291	24%	458	10%

During the 2012-2013 school year, School A's enrollment as of May 2013 was 488 students with 20% of the students receiving special education services. During the 2013-2014 school year, enrollment as of May 2014 was 305 students with 24% of the students receiving special education services. The enrollment during the 2014-2015 school year as of May 2015 was 291 students with 24% receiving special education services.

The second study site also had double-digit percentages of students receiving special education services. During the 2012-2013 school year, School B's enrollment as of May 2013 was 408 students with 14% of students in the school receiving special education services. In the 2013-2014 school year, enrollment as of May 2014 was 439 students with 12% of students receiving special education services. And during the 2014-2015 school year, enrollment as of May 2015 was 458 students with 10% receiving special education services.

At each of the schools that participated in the study, there was a school team tasked with identifying and providing interventions for students who were deemed at-risk for school failure. This team was known as the SST. The SST team was comprised of core and ancillary members. The core team consisted of three to five educators who were representative of school staff and had differing levels of expertise and experience in their respective fields. Other school personnel could become a part of the team as needed based on the issue or problem that was being addressed. These other members could include the school nurse, school psychologist, special education teacher, and community members. Each member of the team served in a specified role and participated to assist the team with decision-making. The team met on designated dates and times to discuss students who were at-risk for academic failure or students who had been referred for additional support. The team met at regular intervals to review data and discuss possible next steps in student assistance. Following the intervention period, the team made a decision about the amount of student progress and any future plans.

Instrumentation

One way to examine the effectiveness of the schools' SST teams was to review the number of students who already were enrolled or were being considered for referral for additional services outside of the services provided by the school team (e.g., special education or 504 accommodation plans). When implementing change, "school district personnel need time to identify, learn, and then implement a variety of interventions that might meet the unique needs of each individual student who is at-risk for academic and behavior success" (Carney & Stiefel, 2008, p. 73). This study examined the effect of professional development on SST referrals and the number of students who participates

in processes implemented in schools to assist struggling learners prior to their referral for assessment for special education services.

The data collection tool used for this study contained five overall components to examine information in each SST file. The components included pre-referral process quality, performance standard quality, data collection, evaluation process, and whether or not the evaluation process resulted in an appropriate decision. Information maintained in each file was examined and coded based on indicators of each component. Each of the 10 indicators were coded as to the presence or absence of information in each file. Each indicator resulted in a 10-point index score for each file. The maximum index score that a file could be given was 10 indicating that the file contained all information outlined on the data collection tool.

Data Collection

Data collection consisted of an examination of SST files of students who were enrolled at the two elementary schools included in this study. The files reviewed were files of all students assisted by the SST teams during the school year. Historical and in-process information was examined to determine if a comprehensive professional development model resulted in more effective operation and decision-making of school teams and in turn decreased referrals for special education assessment and placement for students having difficulties. Fifty-six files were reviewed for this study. Twenty-nine student files were reviewed before the professional development intervention, and 27 different files were reviewed after the intervention. The analysis of the files was conducted using pre-existing information that was contained in student files that were maintained by SST teams.

Data were collected using a tool designed to examine different measures contained in an SST file as shown in Figure 2. The data collection tool contained five overall components: pre-referral process quality, performance standard quality, data collection, evaluation process, and whether or not the evaluation process resulted in an appropriate decision. The pre-referral process quality determined whether or not the required forms for a student to be referred to the SST team were included in the file. Performance standard quality examined identification of the student's expected level of performance on an identified skill, what was used to determine where the student's score came from (i.e., measure), a specific period by which the student was to reach the outcome, and the objective or score that would indicate the student had met or obtained the identified skill. Data collection was the data and information gathered that were related to the identified problem as well as data that were collected during the intervention. Data collected should be present and relevant to the problem. The evaluation process included the indication that the process followed had been examined. Lastly, the evaluation process was examined to determine if an appropriate decision about a referral for special education evaluation by the team was made.

All components of the data collection tool were completed for each SST file reviewed at the two schools included in this study. Each component was coded based on whether or not the information being reviewed was present. If the information was present, the component was coded as 1. If the information was not present, the component was coded as 0. Each of the components received a score based on the review of the information contained in the individual component from the file. Each file

was coded to maintain the confidentiality of the student and their information. Figure 2 displays the data collection tool for this study.

Rating/Data collection Tool for SST Process	
Components (Measures)	Code Yes =1 No =0
Pre-referral Process Quality	
Referral form	
Problem Identification Checklist	
<i>Score</i>	
Performance Standard Quality	
Student specific skill stated well	
Measure identified	
Time specific outcome	
Objective or outcome score	
<i>Score</i>	
Data Collection	
Pre-intervention data	
Data collected during intervention	
<i>Score</i>	
Evaluation Process	
Evaluation Conducted	
<i>Score</i>	
Evaluated Correctly	
<i>Score</i>	

1. Referral Form-This is a required form for a student to be referred to the Student Support Team.
2. Problem Identification Checklist-Form required as part of referral to the Student Support Team.
3. Student specific skill stated well-This is the skill that the student should obtain including grade level standard, Benchmark measure, etc.
4. Measure identified-What is used to determine where a score is derived from; the score is the indicator. Example: Student will correctly answer 8 of 10 arithmetic questions-the measure is the percent of times the student got the correct answer.
5. Time specific outcome-Specific time frame by when the student will reach the outcome.
6. Objective or outcome score-What will be the objective or score that will indicate the student has met the identified skill?
7. Pre-intervention data-This data collected relevant to the identified problem of the student.
8. Data collected during intervention-The data collected during the intervention should be present and relevant.
9. Evaluation conducted-This information should indicate that an evaluation has been made of the process followed.
10. Evaluated Correctly-This should indicate if the student was referred to Special Education or not and if that was an appropriate decision.

Figure 2. Data Collection Tool.

Following the collection of data about the SST files at School A and School B, the total scores for each file reviewed were evaluated in relation to the other files reviewed.

The data were collected over a four month period in the fall of the 2016-2017 school year.

The review of SST team files was conducted at the two schools identified as the focus for this study. There were two times that SST files were reviewed: before and after the professional development to the school-level teams. A district-level staff member first reviewed the team's files prior to the delivery of professional development. This district-level staff person was considered the subject matter expert in pre-referral processes because of their level of education and experience in providing support to the SST teams at each of the schools in the district. Following the delivery of professional development, two district-level staff members, both with the education and experience with pre-referral and special education referral processes, reviewed the SST files to validate both the measure and the consistency of data collection.

Following approval of the proposal for this study by the dissertation committee but prior to the collection of data, an application was submitted to the Institutional Review Board (IRB) at the university. The permission to conduct the research was approved at the university level (see Appendix C), but IRB approval at the national level also had to be obtained by the researcher. Following adherence to the national level approval procedures and processes, which included proof of university level IRB approval to conduct research, the permission to conduct the research using school data was approved. The national level approval timeline was approximately nine months.

Data Analysis

Analysis consisted of an examination of information gathered from school SST files and the SST team referrals for evaluation for special education. A comparison of the

audit of files before the professional development to school teams and after professional development was conducted to determine if the professional development was effective in improving the functioning and decision-making skills of the team, which in turn had an impact on the referral rate for evaluation for special education eligibility. The independent variable for this study was group. The dependent variable for one research question was the total scores for each file that was reviewed. The dependent variable for the second research question was the number of correct decisions regarding special education placements made after professional development.

The analysis of the data collected consisted of an examination of the total scores for each file reviewed. Each total file score was based on a score of 1 or 0 on each of the indicators of the components of the files that were reviewed. The maximum score that each file could obtain was 10 if all indicators within a component were present. Further analysis examined instances where scores of 0 were consistently recorded as indicators of the components to determine if there were any trends noted in the files that were reviewed. Following data collection, analysis was performed using an ANOVA to answer Research Question 1. For Research Question 2, a frequency distribution was conducted to examine the number of correct and incorrect placement decisions before and after the professional development.

Summary

This study was designed to investigate the effectiveness of aligned professional development on the operation of the RTI process at two elementary schools and its effect in reducing the disproportionate rate of special education enrollment in each school. This ex-post facto study examined student files compiled before and after district-level staff

developed and provided professional development training to school teams about decision-making processes for students who have been identified as being at-risk or in need of intervention for academic problems.

Data collection consisted of an examination of 56 different SST files of students who were enrolled at the two elementary schools included in this study. Data were collected using an instrument that examined the components of students' SST files. The data were collected from two different times in the duration of the district's RTI corrective action plan: before and after the professional development to the school-level teams. Following the collection of data, an ANOVA was conducted to determine the group differences.

CHAPTER IV

RESULTS

Introduction

This study examined two research questions to determine the effect of professional development on the SST teams at two elementary schools. The SST teams collected data and maintained individual student files about interventions and referrals for special education evaluation and services. The goal of this study was to examine whether professional development had an effect on increasing the quality and thoroughness with which staff completed SST files and provided students with support services. The independent variable was group with two levels, students' SST files that were completed before the professional development and students' SST files that were completed after the professional development. The data used for the dependent variable for research question one were a 10-point score constructed from measuring the presence of what number of the 10 possible attributes should have been in each SST file. The dependent variable for research question two was the number of correct decisions regarding special education made after professional development.

Research Question 1 examined whether professional development that addressed the skills and knowledge about how to correctly review student files for deciding on placement into special education improves the quality of the evaluation process.

Null Hypothesis: The number of screening process omissions after the professional development is equal to the number of omissions before the professional development.

Alternative Hypothesis: The number of screening process omissions after the professional development is less than the number of omissions before the professional development.

Null Hypothesis: $\mu_{\text{before}} = \mu_{\text{after}}$

Alternative Hypothesis: $\mu_{\text{before}} > \mu_{\text{after}}$

Research Question 2 examined whether professional development increases the number of correct decisions made regarding special education referral.

Null Hypothesis: The number of correct decisions made regarding special education referral after the professional development is equal to the number correct decisions made before the professional development.

Alternative Hypothesis: The number of correct decisions made regarding special education referral after the professional development is more than the number of placement errors before the professional development.

Null Hypothesis: $\mu_{\text{before}} = \mu_{\text{after}}$

Alternative Hypothesis: $\mu_{\text{before}} < \mu_{\text{after}}$

The research questions examined through this research related to the effects of professional development on school team skills when intervening with students with academic and/or behavioral difficulties. Each of the research questions was examined based on the data collected from the review of SST files and information about referral of students by the team for evaluation for special education services.

Participants

This quantitative ex post facto study examined different students' SST files from two elementary schools in a school district in the Southeastern United States. The two elementary schools included in this study provided education services to students from Kindergarten to fifth grade. The schools included in this study provided both general and special education services to students.

Findings

Research Question 1

This study employed a one-way ANOVA procedure to analyze the data that were collected. More specifically, it was a one factor, two-level design. The factor or independent variable in this analysis was group; the two levels of the factor were 1) files completed before professional development and 2) files completed after the professional development.

The purpose of using this statistic was to test the research hypotheses that the professional development, as the intervention or treatment, had an effect on the quality of the SST files at the two schools. The hypotheses were that the file scores before professional development was conducted would be higher than file scores after professional development. Notationally, the research questions were represented by a null hypothesis of $H_0: \mu_{\text{before}} = \mu_{\text{after}}$ and alternative hypotheses as $H_1: \mu_{\text{before}} > \mu_{\text{after}}$. Specifically, the ANOVA determined if there was a difference in means between the two groups and assessed the significance level via conducting a one-tailed test.

Before conducting and reporting the analysis, a test was administered to determine whether the data met several assumptions for using an ANOVA procedure.

The first was to test for normality of the dependent variable, and the second was to test for equality of variances. There are two ways to visualize normality. One way was to display the distribution of the data for the dependent variable of file completeness is a histogram of the index scores, as shown in Figure 3. A visual inspection of the histogram that had a normal curve superimposed on it shows that the distribution was considered Gaussian or normal. A second way to test for normality was to construct a normal P-P (probability-probability) plot and inspect the residuals from the files to ascertain how closely they follow the cumulative probability line. Figure 4 shows that the distribution of the dependent variable was normal.

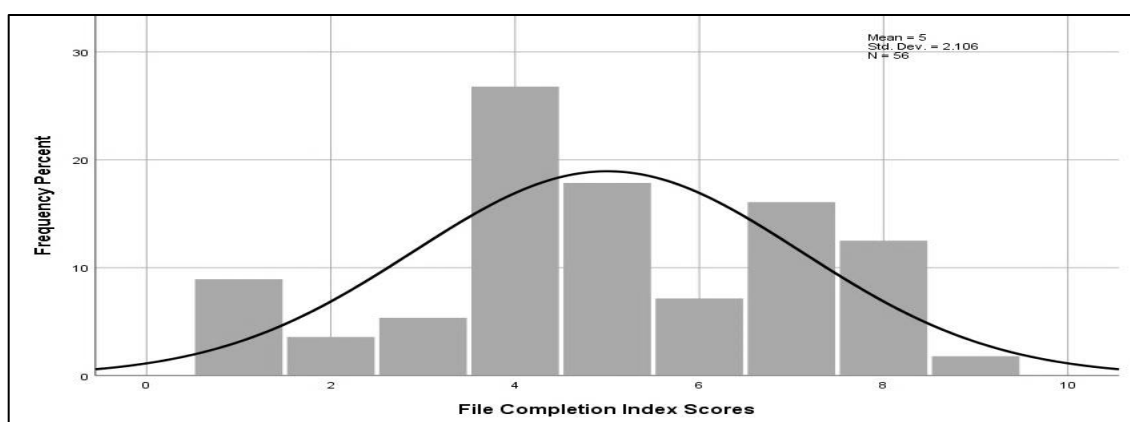


Figure 3. Histogram for Normality. The distribution is considered normal.

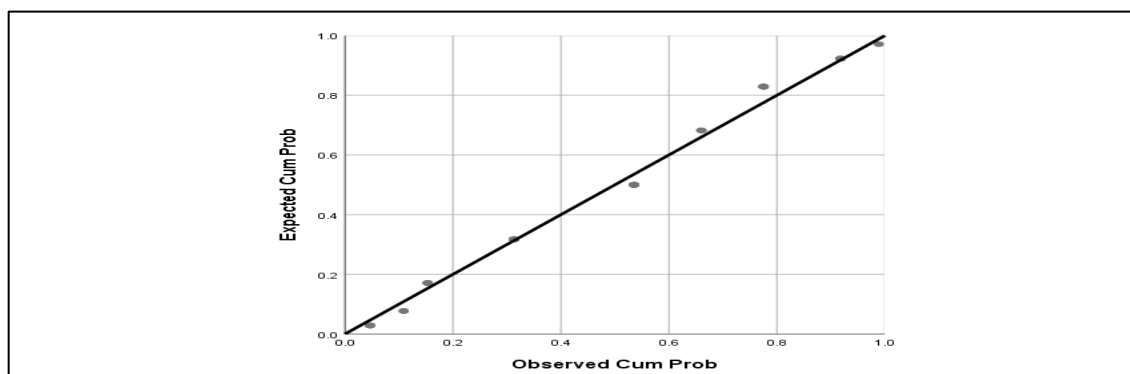


Figure 4. Probability-Probability Plot for Reviewed Files. The distribution was normal.

The second condition of ANOVA is equality of variance or homogeneity to determine if the variances of the groups were the same or very similar. The Levene's

Test assesses the null hypothesis of the equal variances. The Levene's test was not significant at 0.333 with a p -value of .576, thus providing evidence that the variances for each of the two groups were equal.

A preliminary look at the various descriptive statistics, as presented in Table 2, shows empirical support for the hypotheses. The means are a point estimate and measure of central tendency among the two groups. The means show that the main effect of professional development had an impact. The marginal mean of before professional development group data was 3.86, and the mean of the after professional development group data was 6.22. The scores for the 95% confidence interval also indicated both a substantive and significant difference. The upper-bound score of the non-PD group did not overlap the lower-bound score of the PD group. The results indicated that there was a substantial difference even when accounting for sampling error.

Table 2

Descriptive Statistics for Before and After Professional Development File Scores

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SE</i>	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Before PD Group	29	3.86	1.767	.328	3.19	4.53
After PD Group	27	6.22	1.739	.335	5.53	6.91
Total	56	5.00	2.106	.281	4.44	5.56

Additional frequency information about the scores from the files is presented in Tables 3 and 4. An examination of these scores indicated that a larger percentage of folders with higher scores was in the after professional development group. The highest percentage of folders that had a score of 4 were in the before professional development

group. The highest percentage of folders in the after professional development group had a score of 8.

Table 3

Folder Score Distribution Before Professional Development

Folder Score	Number of Folders	Percentage of Folders
0	0	0
1	5	17
2	1	3
3	3	10
4	11	38
5	5	17
6	2	7
7	1	3
8	1	3
9	0	0
10	0	0

Table 4

Folder Score Distribution After Professional Development

Folder Score	Number of Folders	Percentage of Folders
0	0	0
1	0	0
2	1	4
3	0	0
4	4	15
5	3	11
6	4	15
7	8	30
8	6	22
9	1	4
10	0	0

An examination of variance provides a picture on how much the set scores for each group vary from each other. The within-group variances help uncover how much difference lies between the distributions of scores between the groups. Figures 5 and 6

display the shape of the two groups' distributions as juxtaposed against each other.

Examination indicated that there was a difference between the two groups. The spread of the distribution was the same, but the location or center of the two distributions was different. In other words, examining the location of the shapes or distributions, which were approximately normal, revealed that a substantial bulk of the professional development groups' scores laid above the mean of the before professional development groups' scores. The pre-professional development file review scores were skewed more toward the lower end of scores, and the after professional development file review scores were higher, indicating that the professional development had an effect. The most frequently occurring score of the before professional development file scores was 4, while it was 7 for the after professional development file review scores.

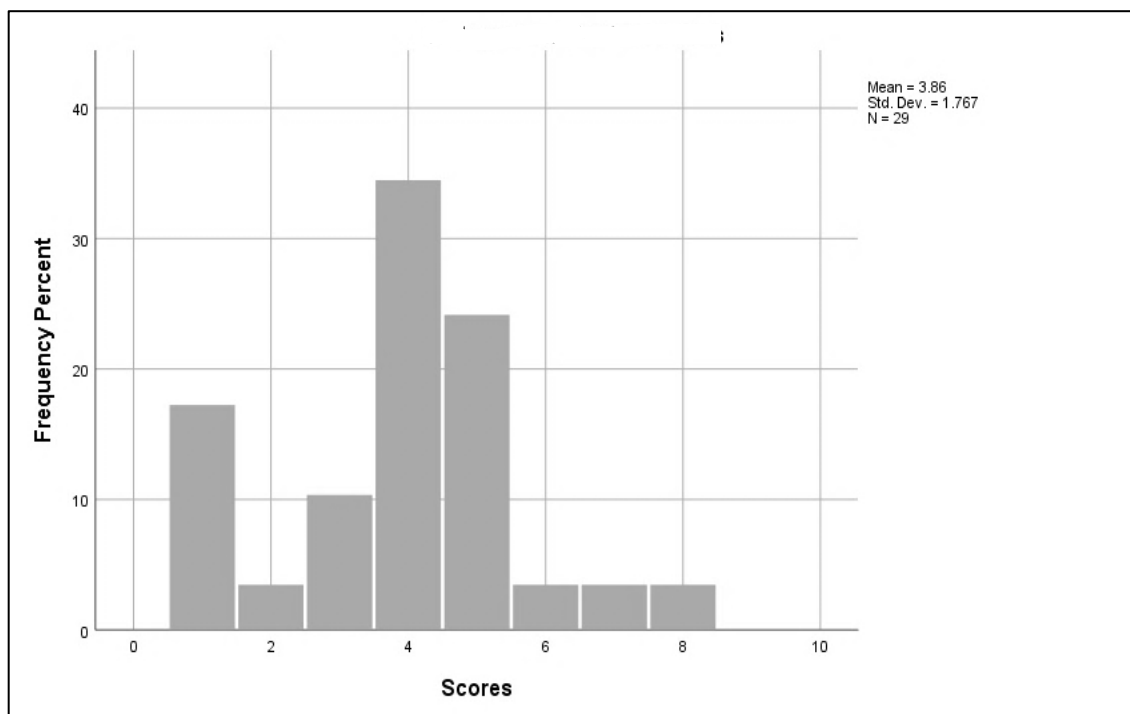


Figure 5. Before Professional Development File Score Distribution by Percentage.

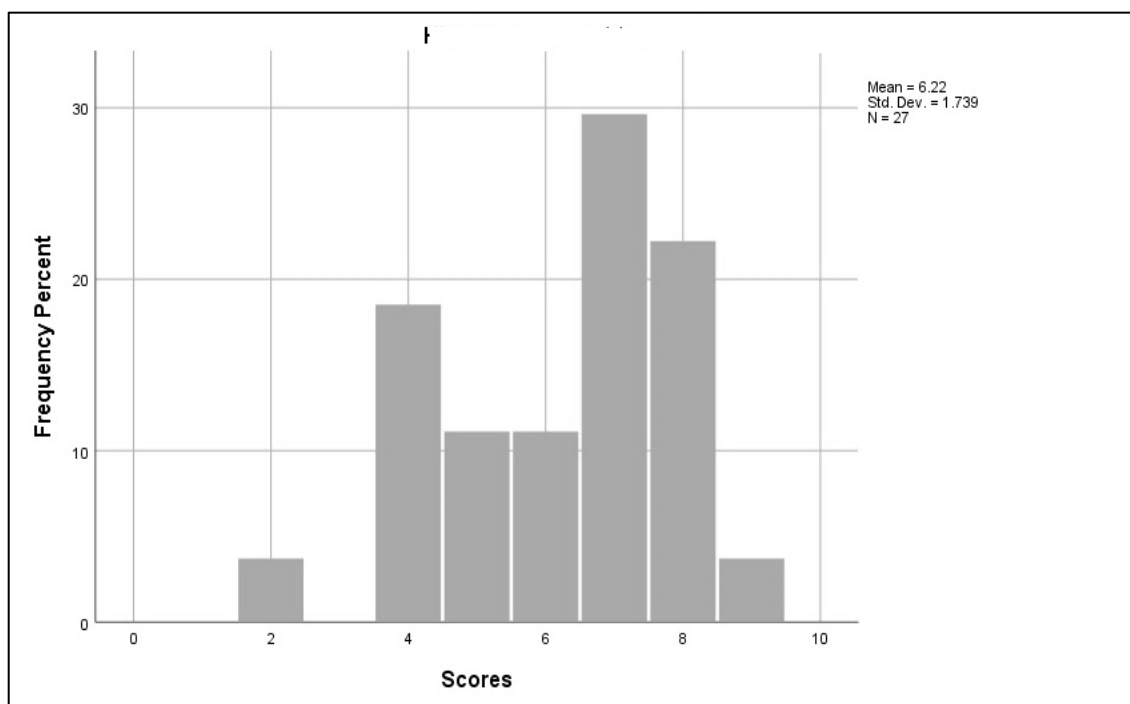


Figure 6. After Professional Development File Score Distribution by Percentage.

The results of the ANOVA analysis, which are shown in Table 5, indicated that the intervention had a substantive positive effect and that it was statistically significant. The analysis illustrated that a first step in assuring that the results or findings are not due to sampling error was completed. The *F*-test determines whether the groups are significantly different by dividing the mean between-sum-squares by the mean within-sum-squares. In this dataset, the *F*-ratio (using degrees of freedom 1,54 for the between and within sum-of-squares, respectively) was 25.3; the *p*-value < .000 and thus was strong evidence for rejecting the null hypothesis in favor of the alternative hypothesis. Rejecting the null hypothesis leads to the ability to conclude that there was a statistically significant difference between the before professional development and after professional development groups. In this study, there were only two groups, so there was not a need to conduct any post-hoc tests.

The next step after significance testing was to measure the strength of the relationship. For this research design, which was an ANOVA, one appropriate effect size measure is partial eta squared. This effect size measured the strength of the relationship by dividing the between-sum-of-squares by the total-sum-of-squares. The effect size is a means to explain the amount of variance in the dependent variable that is accounted for by the independent variable. In this case, the factor or independent variable focuses on before and after the professional development. The partial eta effect size was .32 as evidenced in Table 5.

Table 5

Analysis of Variance for All Files Reviewed

Files	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	η_p
Between	77.885	1	77.885	25.319	.000	.319
Within	166.115	54	3.076			
Total	244.000	55				

Consequently, the unexplained variance means that there were other causal factors that can affect the file quality variable, but this study's design was not able to identify those factors or to fully disentangle the professional development grouping variable from other possible factors. There were at least two methodological reasons for not being able to identify other causal factors. First, the model was not fully specified in that not all possible, relevant causal factors were used, which is a means to test other variables of interest stemming from theory as to what affects the file completion quality. The model only considered professional development implementation as a causal factor. Second, this study was an observational research design rather than experimental design in which the participants were randomly assigned, and the researcher did not manipulate the independent variable. Thus, the ex post facto research design affects the internal

validity, meaning that it was not possible to control fully for other possible confounding variables that might lessen the effect of the professional development on file completeness variables.

Research Question 2 examined whether professional development increases the number of correct decisions made regarding special education referral. Information about correct and incorrect decisions regarding special education referral was analyzed. The determination as to whether or not the decision regarding special education referral was correct was based on other components that were present and examined in the file. Frequency information about the number of correct and incorrect decisions regarding special education referral is presented in Table 6. An examination of the scores indicated that the number of incorrect decisions out of 29 files before the professional development was 12 (41%) and the number of incorrect decisions out of 27 files after the professional development was 6 (22%). The number of correct decisions made when examining files before the professional development was 17 out of 29 (59%) and 21 out of 27 (78%) after the professional development. The results indicated that there was a decrease in the number of incorrect decisions and an increase in the number of correct decisions made about referral for special education services after professional development was provided to the school teams.

Table 6

Number of Special Education Referrals Before and After Professional Development

Number of Files	File Group	Number of Incorrect Decisions(Percentage)	Number of Correct Decisions(Percentage)
N=29	Before Professional Development	12(41%)	17(59%)
N=27	After Professional Development	6/22%	21/78%

Summary

This study explored two research questions. Research Question 1 examined whether professional development that addressed the skills and knowledge about how to correctly review student files for deciding on placement into special education improves the quality of the evaluation process. Research Question 2 examined whether professional development increases the number of correct decisions made regarding special education referral. An ANOVA was conducted to determine if there were differences in group means. The results indicated that there was a statistically significant difference in the knowledge and skills of an SST team after the professional development when providing intervention services to at-risk and struggling learners at the schools that were included in the study. The results indicated that the SST teams made an increased number of correct decisions about whether or not students were referred for evaluation for special education and their subsequent identification or non-identification as a student in need of special education services after the professional development. Based on the additional components of the files following the professional development, it can be inferred that the teams who received the professional development made a greater number of correct decisions about a student's special education referral.

CHAPTER V

DISCUSSION

Summary of the Study

RTI, which grew out of the federally legislated Individuals with Disabilities Education Act of 2004, is a multi-tiered process that outlines evidenced-based practices based on student needs. This process is designed to ensure that students are given the opportunity to respond to educationally designed academic and behavioral interventions prior to referral to and possible subsequent placement in special education.

This study evolved from a real challenge faced by a school district as a result of an independent audit of the district's special education files. After rectifying inconsistencies in what data were to be collected for decision making by each school's SST with the construction of a district form (Appendix A), attention was turned to providing professional development focused on the use of the new form in the RTI process. The presentation from the initial professional development workshop has been included in this study as Appendix B.

The purpose of this study was to examine the impact of the aligned professional development on the data collected in individual student files. A group of 29 student files from the two schools that participated in the study was selected for review by the researcher before the professional development workshop. In the after professional development group, 27 files were evaluated. For both reviews, a district utilized

instrument was used to derive a file score to reflect the level of data collected in the RTI process.

Analysis of Research Findings

The results of the analysis of data indicated a statistically significant difference in the knowledge and skills of an SST team after the professional development when providing RTI to struggling learners at the schools that were included in the study. The results indicated that professional development had an impact on the data contained in the student files, which is used to make decisions about student referrals for special education. While certain documents were required, support data, such as test and assignment documents, observation notes, parent involvement, content specialist recommendations, were expected to be in folders. There may be other causal factors that may have affected the results, such as training and education of team members. Another possible causal factor could be the amount of experience in the field and prior RTI experience of team members. Lastly, the amount of professional development could have impacted results, such as if the professional development was provided over a longer period of time or there were additional sessions of professional development provided to allow participants to demonstrate mastery of the knowledge that they were provided.

Discussion of Research Findings

The analysis of data for this study indicated that the difference in mean file scores for before and after professional development review was statistically significant. Increasing from a mode of 4 in the before professional development file evaluation to a mode of 7 in the after professional development file evaluation, this change reflected a positive impact of the use of the district SST form and the professional development

related to using the form in the RTI process. With more evidence-based data included in the student files, SST members could be better equipped to make decisions related to instructional interventions for struggling learners. Before the professional development, only 4 of 29 files received a file score of 6 or higher (13.8%) whereas after professional development, 19 of 27 files (70.4%) were received a file score of 6 or higher on the 10-point scale. At the conclusion of this study, SST student folder review indicated significant improvement in data collection by the school teams. The after professional development files confidently can be characterized as more complete and consistent than the student files from the before professional development files. The percentage of correct decisions made before professional development was 59%, and the percentage of correct decisions made after the professional development was 78%, which indicated an increase of correct decisions made about referral for special education services.

From 2012 to 2015, the number of students in special education at the study schools decreased (Table 1). It should be noted that the enrollment at School A declined over these 3 years resulting in a higher percentage of special education enrollment though the number of students receiving special education services decreased. The enrollment at School B increased from 2012 to 2015 while the percentage of students receiving special education services decreased from 14% to 10% respectively. This study did not investigate possible correlation between the professional development and special education enrollment; the causes for the decrease in special education enrollment could serve as a possible area for future longitudinal study.

Conclusions

The literature review in Chapter II of this study indicated that in a school or district, students learn in a variety of ways. A review of the literature revealed that RTI is a legal requirement for schools and school districts in order to ensure that at-risk or struggling students make academic progress. This study included an ANOVA along with descriptive statistics to analyze data and results. When school teams are able to use student information to make decisions about interventions provided to students and their response, there can be increased achievement of students. This study can provide a framework for schools and school districts as they either examine their existing RTI processes and practices or plan for professional development for SST teams.

Implications

This study could potentially be replicated in any school or school district that would like to examine the effects of an aligned professional development model on student and school development. The professional development protocol used in this research can be used to implement a professional development program across a school district or multiple districts to improve practices of SST teams. This professional development program can be used to change existing practices or with the formulation of policies and procedures for districts to implement.

The focus of this study was the provision of an aligned professional development model to SST. Although the potential effects of the professional development provided focused primarily on the examination of files, future research may involve study and analysis of school team experiences. There may be a consideration of the use of surveys and/or interviews to get participant points of view about their attitudes about the RTI and

SST experience both before and after the professional development. The use of surveys and interviews may provide more comprehensive views of how participants view not only their roles on the teams, but their thoughts about the SST process and team ability to impact student functioning.

Limitations

One limitation of this study was the length of time that professional development was provided. It was the original intention of the study to examine the effects of professional development provided to the SST teams beyond one school year. This examination of RTI process over time was not able to be accomplished due to a restructuring of the school district, which resulted in changes at both the district and school levels. A notable result of the restructuring were modifications to the composition of the school teams and did not allow for examination of effects of professional development beyond one school year.

Another limitation of the research was that over the course of study, the school district experienced reorganization. The reorganization resulted in changes in staff and students at both of the schools. Reorganization of the school district could have caused changes in the school teams as a result in changes in staff.

A third limitation of this study was the setting of the research. The public-school district where the study was conducted had high rates of mobility of staff among schools in the district and to other schools outside of the district. The mobility rates for staff caused changes in school teams. The variation in school team configuration could have impacted the data and information that were in a file.

Recommendations

This study only included two schools in a school district. Future research on the effects of professional development on SST teams could include all of the schools in a district. Including more schools could allow for research to be conducted across time and potentially across school years. Incorporating all of the schools in a district would also allow for more generalized conclusions to be drawn about how to improve the practices in a school and possibly across the district. Including more schools can highlight ways to improve the SST team practices and in turn help students and schools to experience success.

The professional development in this study was focused more on the processes and decision-making of the SST team. Aligning professional development to focus on one aspect of the SST team's practices aimed at increasing student achievement may be considered for future research. For example, the professional development may be more focused on how the SST can design effective, research-based intervention plans for students. Following professional development focused on this aspect, the effects could be examined to determine if the teams have improved the ability to assist students with academic and behavioral difficulties.

An additional consideration for future research could be to examine student's response to SST team decision-making. The impact of team decision-making about instructional and/or behavioral interventions on student achievement could be studied. An examination of this aspect can provide information about student progress in RTI models and inspect subsequent student placement in special education.

Concluding Thoughts

As noted by Collinson et al. (2009), “Education is beginning to implement changes that encourage teachers and principals to engage in learning together for the purpose of improving teaching, and by extension, learning for the children in their care” (p. 5). Each day across the country, teachers have the great responsibility of providing education services for students who attend school, whether they be highly intelligent or in need of specialized instruction. Designing and implementing an RTI and continuous professional development process in a school or district can potentially result in comprehensive instruction to students that result in benefits to all and improve the overall functioning of a school.

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APPENDICES

Appendix A

Student Support Team Forms

Student Support Team Referral Form

Student	Date of Birth	Grade	(Circle One) Male Female	Referral Date
Teacher	Parent/Sponsor	Date of Vision/Hearing Screening: _____ Vision: Pass ___ Fail ___ Hearing: Pass ___ Fail ___		
Reason for Referral: <input type="checkbox"/> Weak Academic Skills <input type="checkbox"/> Speech/Language <input type="checkbox"/> Behavioral <input type="checkbox"/> Social/Emotional <input type="checkbox"/> Health/Medical <input type="checkbox"/> Inattention/Distractibility <input type="checkbox"/> Attendance <input type="checkbox"/> Other(Please Explain): _____		Social/Behavioral Concerns: <input type="checkbox"/> Inattention <input type="checkbox"/> Distractibility <input type="checkbox"/> Impulsivity <input type="checkbox"/> Hyperactivity <input type="checkbox"/> Defiance <input type="checkbox"/> Poor Peer Relationships <input type="checkbox"/> Poor Teacher/Adult Relationships <input type="checkbox"/> Other(Please Explain): _____		
Student's Strengths: <input type="checkbox"/> Early Literacy Skills <input type="checkbox"/> Basic Reading <input type="checkbox"/> Reading Comprehension <input type="checkbox"/> Writing <input type="checkbox"/> Spelling <input type="checkbox"/> Mathematics <input type="checkbox"/> Motivation <input type="checkbox"/> Speech/Language <input type="checkbox"/> Social Skills <input type="checkbox"/> Attention <input type="checkbox"/> Behavior <input type="checkbox"/> Other(Please Explain): _____		Student's Weaknesses: <input type="checkbox"/> Early Literacy Skills <input type="checkbox"/> Basic Reading <input type="checkbox"/> Reading Comprehension <input type="checkbox"/> Writing <input type="checkbox"/> Spelling <input type="checkbox"/> Mathematics <input type="checkbox"/> Motivation <input type="checkbox"/> Speech/Language <input type="checkbox"/> Social Skills <input type="checkbox"/> Attention <input type="checkbox"/> Behavior <input type="checkbox"/> Other(Please Explain): _____		
Specific Area(s) of Concern:				
Please indicate what personnel you have consulted with regarding this student:				
<input type="checkbox"/> Regular Ed Teachers	<input type="checkbox"/> School Nurse	<input type="checkbox"/> School Administrator	<input type="checkbox"/> Read 180 Teacher	
<input type="checkbox"/> Special Ed Teachers	<input type="checkbox"/> Speech Pathologist	<input type="checkbox"/> School Psychologist	<input type="checkbox"/> IS Math Teacher	
<input type="checkbox"/> School Counselor	<input type="checkbox"/> OT/PT	<input type="checkbox"/> Gifted Teacher	<input type="checkbox"/> Other	
How and when were the student's parent(s) and/or sponsor contacted about this referral?				
Parent Contact Date: _____ Conference ___ Letter ___ Phone ___ Email ___				
Parent Concerns/Comments (from conferences/contacts):				
What type of supportive services has this student received in the past? None ___ ESL ___ Medical ___ SST ___ IEP ___ Behavior Plan ___ Speech ___ Social Work ___ Counseling ___ OT/PT ___				
Has the student been retained? Yes ___ No ___ If yes, what grade? _____				
Attendance History Days Absent _____ Days Tardy _____				
Terra Nova Scores Grade _____ Language: _____ Math: _____ Reading: _____		Terra Nova Scores Grade _____ Language: _____ Math: _____ Reading: _____		Other Assessment Grade _____

Student Support Team Referral Form

BAS Level _____ Date _____ Independent _____ Instructional _____ Difficult _____ Above Level On Level Below Level		BAS Level _____ Date _____ Independent _____ Instructional _____ Difficult _____ Above Level On Level Below Level		Other Assessment _____ Grade _____	
Lexile Level _____ Date _____ SRI Score _____ (Circle One) Above Level On Level Below Level Far Below Level		Lexile Level _____ Date _____ SRI Score _____ (Circle One) Above Level On Level Below Level Far Below Level		Other Assessment _____ Grade _____	
Classroom Function <i>Gather work samples that illustrate strengths and weaknesses (Check only those that apply)</i>			Above Average	Average	Below Average
			Well Below Average		
Early Literacy Skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reading Comprehension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Phonemic Awareness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Phonics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fluency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vocabulary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Math Computation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Math Reasoning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Problem Solving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Number Sense	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Written Expression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sentence Structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spelling/Punctuation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fine Motor Tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gross Motor Tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Following Directions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Learning New Concepts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Memorization/Remembering Information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Articulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Any additional comments or concerns:					
Interventions/Accommodations previously or currently used to help this student find success:					
1	Intervention:				
	Date Started & Duration:				
	Result(s)				
2	Intervention:				
	Date Started & Duration:				
	Result(s)				
3	Intervention:				
	Date Started & Duration:				
	Result(s)				

SST PROBLEM IDENTIFICATION CHECKLIST FOR PRE-K & KINDERGARTEN

Student Name: _____ Date: _____

Gender: M F Teacher: _____

Cognitive Development

Refers to attention, memory, general knowledge, pre-academic skills and verbal and nonverbal thinking and problem solving skills

Areas	Not Concerned	Mild Concern (Bottom 1/3 rd)	Significant Concern (Bottom 1/10 th)
1. Points to or names at least 20 items/pictures upon request			
2. Beginning to develop knowledge of letters and numbers			
3. Listens and responds to stories read out loud			
4. Shows beginning understanding of the concept of print			
5. Sorts objects into at a category (color, size, function)			
6. Shows understanding quantity (one, one more)			
7. Identifies at least 3 colors and 3 shapes			
8. Shows understanding positional words (in, on, under, out)			
9. Asks "wh" (who, what, where, etc.) questions			

Communication Development

Refers to receptive language ability to respond to spoken words and follow directions and expressive language ability to communicate nonverbally using gestures, demonstrate oral language skills using words use oral language in social situations and asks questions.

Areas	Not Concerned	Mild Concern (Bottom 1/3 rd)	Significant Concern (Bottom 1/10 th)
1. Demonstrates understanding of yes/no			
2. Points/names 3 to 5 body parts on self or in picture			
3. Communicates wants and needs with words			
4. Gains meaning by listening			
5. Follows one and/or two-step directions			
6. Sings a favorite song or retells a favorite nursery rhyme			
7. Speaks clearly enough to be understood			
8. Uses expanded language for a variety of purposes			
9. Has a vocabulary of 50 to 100 words			
10. Tells about his/her own experience in simple sentences			

Social-Emotional Development

Refers to ability to build relationships with adults and peers, develop friendships, demonstrates self-confidence, regulates emotions and behaviors, follows school routine and social rules in group situations and demonstrates imagination through dramatic play

Areas	Not Concerned	Mild Concern (Bottom 1/3 rd)	Significant Concern (Bottom 1/10 th)
1. Demonstrates independence with some tasks			
2. Shows some self-direction			
3. Follows established routines			
4. Follows household/classroom rules			
5. Makes social contact with peers or familiar adults			
6. Answers when a familiar adult makes small talk			

7. Plays cooperatively for 5 minutes			
8. Shares toys or possessions with prompts			
9. Identifies feelings in himself (happy, sad, angry)			
10. Seeks adult help when needed to resolve conflict			
11. Draws a person with at least 3 body parts			

Motor Development

Refers to gross and fine motor ability including eye-hand coordination, controls hands and fingers, controls body movements, demonstrates coordination and balance, and expresses creativity through movement

Areas	Not Concerned	Mild Concern (Bottom 1/3 rd)	Significant Concern (Bottom 1/10 th)
1. Puts objects into a container and takes them back out			
2. Picks up small objects using thumb and fingers			
3. Opens door by turning the doorknob			
4. Turns pages in a book one at a time			
5. Stacks at least 3 blocks			
6. Imitates a horizontal and vertical line			
7. Puts several pieces into an insert-type puzzle			
8. Walks up and down stairs marking time or alternating feet			
9. Runs smoothly without falling			
10. Pedals a tricycle			
11. Climbs on and off an adult-size chair			

Adaptive Behavior Skills

Refers to child's abilities including dressing, feeding, attending to toileting and personal hygiene, and other routine tasks

Areas	Not Concerned	Mild Concern (Bottom 1/3 rd)	Significant Concern (Bottom 1/10 th)
1. Performs some self-care tasks independently (feeding, dressing, toileting)			
2. Follows basic health and safety rules			
3. Follows simple directions from parent/teacher			
4. Follows home/classroom rules			
5. Cleans up area at the end of an activity			
6. Helps with simple household/classroom activities			
7. Attends to a self-chosen activity for 3 to 5 minutes			
8. When asked, able to state first and last name and age			

SST PROBLEM IDENTIFICATION CHECKLIST-
Grades 1 - 5

Student Name _____ Date _____ Teacher/Grade _____

BASIC READING

(Recognizing and decoding words)

Area/ Specific Skill	No Concern	Mild Concern (Bottom 1/3)	Significant Concern (Bottom 1/10)
1. Recognizes letters			
2. Identifies letter/sound associations			
3. Blends/rhymes sounds			
4. Oral reading fluency			
5. Silent reading fluency (with no sub-vocalizations)			

READING COMPREHENSION

(Understanding and relating information from printed sources)

Area/ Specific Skill	No Concern	Mild Concern (Bottom 1/3)	Significant Concern (Bottom 1/10)
1. Uses visual cues (pictures, graphs) to assist comprehension			
2. Comprehends vocabulary			
3. Recalls facts			
4. Identifies main idea			
5. Infers information not available in text			
6. Draws conclusions			

WRITTEN EXPRESSION

(Expressing ideas in writing)

Area/ Specific Skill	No Concern	Mild Concern (Bottom 1/3)	Significant Concern (Bottom 1/10)
1. Copies symbols/letters/numbers			
2. Writes sentences when given pictures or sentence starters.			
3. Expresses idea appropriately (without regards to grammar/spelling/punctuation)			
3. Spells written words correctly			
4. Correctly uses punctuation, grammar, and capitalization			
5. Uses appropriate vocabulary			
6. Writes sentences of differing complexity			
7. Writes sentences/paragraphs of appropriate length			
8. Uses descriptive language			

MATHEMATICS CALCULATION

(Using basic arithmetic operations)

Area/ Specific Skill	No Concern	Mild Concern (Bottom 1/3)	Significant Concern (Bottom 1/10)
1. Number identification (receptive and expressive)			
2. Analyzes and identifies patterns			
3. Counting skills (rote, one-to-one, rational)			
3. Correctly solves basic math operations (e.g., single digit addition, single digit multiplication)			
4. Comprehends place values			
5. Correctly solves multi-step math operations (e.g., addition with regrouping, long division)			

MATHEMATICS REASONING

(Understanding a presented problem and determining appropriate steps to solve it.)

Area/ Specific Skill	No Concern	Mild Concern (Bottom 1/3)	Significant Concern (Bottom 1/10)
1. Comprehends key words to identify correct math operation used in word problem			
2. Develops numerical statement from information contained in word problems			
3. Demonstrates relationships between fractions, percentages, and decimals			
4. Demonstrates math skills for daily living (e.g., time, measurement, money)			
5. Understands terms and functions of measurement			
6. Understands spatial relationships (e.g., graphs, geometry)			

LISTENING COMPREHENSION*(The ability to understand spoken language) **May also need to complete language checklist*

Area/ Specific Skill	No Concern	Mild Concern (Bottom 1/3)	Significant Concern (Bottom 1/10)
1. Follows simple directions presented orally			
2. Follows complex directions presented orally			
3. Identifies pictures or sentences in response to oral prompts			
4. Retells information or directions appropriately			

MOTIVATION/STUDY SKILLS

Area/ Specific Skill	No Concern	Mild Concern (Bottom 1/3)	Significant Concern (Bottom 1/10)
1. Attends class regularly/on-time			
2. Participates in class discussions/activities			
3. Seems to enjoy learning new things			
5. Quality of work (e.g., sloppy vs. neat, attempting difficult tasks)			
6. Attentive in class			

ORAL EXPRESSION*(use of spoken language to communicate ideas) **May also need to complete language checklist*

Area/ Specific Skill	No Concern	Mild Concern (Bottom 1/3)	Significant Concern (Bottom 1/10)
1. Articulates letter sounds appropriately			
2. Expressive vocabulary			
3. Word Fluency			
4. Initiates conversation appropriately			
5. Asks questions to gain information			
6. Responds appropriately to questions			
7. Tells a story			
8. Clear, descriptive vocabulary usage			
9. Gives directions			

STUDY SKILLS

Area/ Specific Skill	No Concern	Mild Concern (Bottom 1/3)	Significant Concern (Bottom 1/10)
1. Completes homework			
2. Corrects own work			
3. Finishes work by due dates			
4. Organizational skills (e.g., notebooks, calendars)			
5. Prepared for class (e.g., pencil, paper, books)			
6. Home study support			
7. Follows directions/attentive in class			
8. Prepares for tests			

SOCIAL SKILLS


Area/ Specific Skill	No Concern	Mild Concern (Bottom 1/3)	Significant Concern (Bottom 1/10)
1. Works and plays appropriately with peers			
2. Accepts correction/criticism from teacher and attempts to improve			
3. Follows classroom rules and routines			
4. Aware of nonverbal social cues			
5. Attempts new tasks and activities			
6. Established friendships within class			
7. Discipline/suspension/conduct issues			

MOTOR SKILLS

Area/ Specific Skill	No Concern	Mild Concern (Bottom 1/3)	Significant Concern (Bottom 1/10)
1. Age appropriate muscle tone			
2. Coordination and balance			
3. Throwing and kicking skills			
4. Cutting/Pasting skills			
5. Self-care skills (e.g., buttoning, tying, using utensils, etc.)			
6. Tracing/Pre-writing/Writing			


Appendix B

Professional Development Presentation




Student Support Team (SST)

Meeting/Training for SY 2015-2016



Do outcomes matter?



Meeting Outcomes:

1. Gain a clear understanding of the Student Support Team (SST) process.
2. Review required SST/504 documentation.
3. Critically analyze current SST files and 504 plans using guiding questions.

?

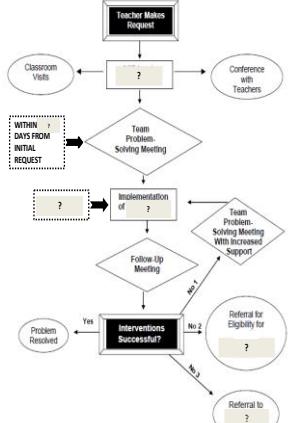
Discuss the following three questions with a partner:

1. What is the purpose of the SST?
2. What are the benefits of an effective SST process?
3. What are the challenges to implementing an effective SST process?

Write responses to each question on post-it notes.
Place post-it notes on respective chart paper.
 (Whole group response reflection)


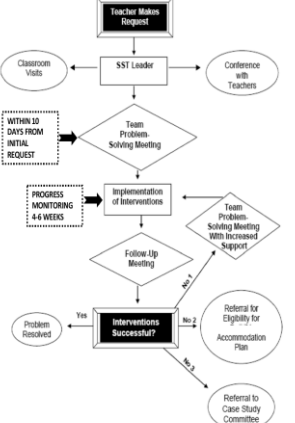
SST Process Flow Chart

- Turn to a partner
- Fill in the blanks



```

graph TD
    A[Teacher Makes Request] --> B[?]
    B --> C[Classroom Visits]
    B --> D[Conference with Teachers]
    B --> E{Team Problem-Solving Meeting}
    E --> F[Implementation of ?]
    F --> G{Follow Up Meeting}
    G --> H{Interventions Successful?}
    H -- Yes --> I[Problem Resolved]
    H -- No --> J[Referral for Eligibility for ?]
    J --> K[?]
    J --> L[Referral to ?]
    
```

```

graph TD
    A[Teacher Makes Request] --> B[SST Leader]
    B --> C[Classroom Visits]
    B --> D[Conference with Teachers]
    B --> E{Team Problem-Solving Meeting}
    E --> F[Implementation of Interventions]
    F --> G{Follow Up Meeting}
    G --> H{Interventions Successful?}
    H -- Yes --> I[Problem Resolved]
    H -- No --> J[Referral for Eligibility for Accommodation Plan]
    J --> K[?]
    J --> L[Referral to Case Study Committee]
    
```

Student Support Team Checklist

Student: _____ Grade: _____
 Teacher: _____ DOB: _____

Check if Complete	Completed Date	Activity
		Video and Training Sessions
		Video Analysis - Having Teacher
		Phase 1: Initial Request
		Teacher Conference - Problem-Solving Meeting
		SST Request Form Completed
		Documentation of Parent Conference/Contact
		Documentation of SST Team Meeting
		Standardized System-Wide Testing Results
		Observation of Classroom
		Work sample related to area of concern
		Phase 2: Intervention Development
		Phase 3: Implementation of Intervention
		Behavior Documentation (if applicable)
		Current gradebook/progress reports
		Completed Problem-Solving Meeting
		Documentation of Interventions Attempted and Results
		Documentation of SST Team Meeting
		Documentation of Accommodations under Modification
		Documentation of Interventions under Modification
		Documentation of Accommodations under Modification
		Completed Large Language Intervention Referral Form (if applicable)
		Other

Please use this checklist as a guideline when preparing an SST referral. Please include the completed checklist in the referral packet. Thank you.

Student Support Team Referral Form		Student Support Team Referral Form	
Name	Date	Name	Date
Teacher		Teacher	
Student		Student	
Referral Type		Referral Type	
1. Academic		1. Academic	
2. Behavior		2. Behavior	
3. Speech		3. Speech	
4. Developmental		4. Developmental	
5. Other		5. Other	
6. Other		6. Other	
7. Other		7. Other	
8. Other		8. Other	
9. Other		9. Other	
10. Other		10. Other	
11. Other		11. Other	
12. Other		12. Other	
13. Other		13. Other	
14. Other		14. Other	
15. Other		15. Other	
16. Other		16. Other	
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18. Other		18. Other	
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27. Other		27. Other	
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41. Other		41. Other	
42. Other		42. Other	
43. Other		43. Other	
44. Other		44. Other	
45. Other		45. Other	
46. Other		46. Other	
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92. Other		92. Other	
93. Other		93. Other	
94. Other		94. Other	
95. Other		95. Other	
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99. Other		99. Other	
100. Other		100. Other	



1. List the identified concern(s)

- Academic
- Behavior
- Speech
- Developmental

SST Problem Identification Checklist for Pre-K & Kindergarten		SST Problem Identification Checklist for Pre-K & Kindergarten	
Student Name	Date	Student Name	Date
Teacher		Teacher	
Student		Student	
Referral Type		Referral Type	
1. Academic		1. Academic	
2. Behavior		2. Behavior	
3. Speech		3. Speech	
4. Developmental		4. Developmental	
5. Other		5. Other	
6. Other		6. Other	
7. Other		7. Other	
8. Other		8. Other	
9. Other		9. Other	
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SST Files Critical Review

Guiding Questions:



- What is the student's expected level of performance?
- What is the student's current level of performance?
- What is the difference between the student's expected and current level of performance?
- What is the short-term goal; is the weekly expected goal appropriate?
- What intervention strategy will be used to reach the academic goal?
- How will the intervention strategy be progress monitored, how often, and by whom?
- How is the progress monitoring data reported?

Is the student responding to the intervention(s)?

No? Was the intervention changed, increased, or revised?

Yes? Were the interventions continued and progress monitored?

Was the student referred to special education?

Yes? How many weeks of progress monitoring were used in the decision-making?

Appendix C

CSU IRB Approval Letter

**COLUMBUS STATE**
UNIVERSITYInstitutional Review Board
4225 University Avenue • Columbus, Georgia 31907-5645

Date: 12/6/16

Protocol Number: 17-041

Protocol Title: Identifying and Addressing the Needs of School Level Teams Assisting
Struggling Learners through a Tiered Intervention and Aligned Professional Development Model

Principal Investigator: Tammy Person

Co-Principal Investigator: Bonita Williams

Dear Tammy Person:

The Columbus State University Institutional Review Board or representative(s) has reviewed your research proposal identified above. It has been determined that the project is classified as exempt under 45 CFR 46.101(b) of the federal regulations because the above study involves collecting de-identified pre-existing data. The study has been approved, and you may begin your research project immediately.

Please note any changes to the protocol must be submitted in writing to the IRB before implementing the change(s). Any adverse events, unexpected problems, and/or incidents that involve risks to participants and/or others must be reported to the Institutional Review Board at irb@columbusstate.edu or (706) 507-8634.

If you have further questions, please feel free to contact the IRB.

Sincerely,

Sincerely,

Jennifer L. Brown, Ph.D.
Chair, Institutional Review Board